ATLAS RESIN
PROPPANTS

www.atlasresinproppants.com

August 16, 2013

VIA FEDERAL EXPRESS

Attn: Compliance Tracker, AE-17J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604

Re: Atlas Resin Proppants, LLC – Taylor Facility
Request to Provide Information Pursuant to Section 114 of the Clean Air Act
Signed June 12, 2013 / Received June 20, 2013

Dear Sir or Madam:

This letter and the various enclosures are provided in response to the "Request to Provide Information Pursuant to the Clean Air Act" (the "Request"), submitted by the United States Environmental Protection Agency to Atlas Resin Proppants, LLC ("Atlas"). The Request was signed June 12, 2013 and was received via U.S. mail on or about June 20, 2013. Based on an email communication between Todd Palmer and Michele Heger, dated July 24, 2013, the enclosed responses are being submitted on or before August 19, 2013.

This response is divided into three sections. Section I contains Atlas's general objections to the Request. Section II provides narrative responses and objections to each of the 20 specific requests for information contained in the Request. Section III contains the supporting data and documents on the compact disk enclosed with this letter.

I. General Objections to the Request

Atlas has made a diligent, good faith effort to provide documents and information which could reasonably be collected and prepared for production within the time frame allotted for this response. Despite these good faith efforts, Atlas notes for the record several general objections to the form and content of the Request, as well as the limited amount of time provided for preparing and compiling the requested information. Atlas reserves the right to provide additional information in response to the Request, if necessary or as appropriate.

PO Box 100 | N7532 County Rd P | Taylor, WI 54659 USA | Phone 715.662.2200 | Fax 715.662.2424

Atlas objects to the Request to the extent it seeks information already in the possession of EPA, or its duly authorized implementation / enforcement agency – the Wisconsin Department of Natural Resources ("WDNR"). Atlas objects to the Request to the extent it seeks documents or records generated more than five years ago, the document retention requirement in Atlas's permit.

Atlas objects to the Request on the grounds that it exceeds EPA authority and is not otherwise authorized by law. Further, the Request is ambiguous, vague and unclear concerning its scope and definitions, requires that legal conclusions be made by Atlas, seeks to have Atlas create records which are not otherwise required to be kept in the ordinary course of business, seeks to have Atlas create records which are not otherwise required to be kept pursuant to the terms of the Clean Air Act ("CAA") or the Wisconsin State Implementation Plan ("SIP"), and is otherwise unreasonable, therefore exceeding EPA's authority.

Atlas objects to the Request to the extent that it may attempt to create a mandatory duty to supplement this response because such attempts would exceed EPA's authority as cited in the Request.

Atlas objects to the Request to the extent that it may ask for information that is subject to attorney-client privilege or other applicable privileges or which otherwise constitutes protected attorney work product. Such information is beyond the scope of this request and, to the extent it exists, will not be produced.

Atlas has taken reasonable steps to avoid inadvertent production of privileged documents. These steps were reasonable and appropriate, given the scope of the request and the limited amount of time allowed for response. Any inadvertent disclosure of privileged or confidential documents shall not be deemed to constitute a waiver in whole or in part of any privilege or confidentiality protection either of the information/document disclosed or to the subject matter of the inadvertent disclosure. In the event of any inadvertent disclosure, EPA should contact Atlas and coordinate the return of the documents/information and destroy any copies.

Atlas objects to the Request to the extent it seeks documents that "relate to", "concern" or "refer to" (or similar terms) various subjects. These types of terms are vague and overbroad, potentially including an unreasonably large number of documents of little or no probative value to CAA compliance issues. Such requests therefore have been construed as only applying to final versions of documents or information that primarily and directly relate to or concern the type of CAA legal and factual issues that we understand EPA to have pursued against other industry sectors.

Where the Request is vague, ambiguous, overbroad or beyond the scope of EPA's authority, Atlas has nonetheless undertaken good faith and reasonable efforts to interpret the Request and provide, to the best of its ability, sufficiently responsive information via that interpretation. Yet, by responding to the Request, Atlas is not conceding that its answers or other responsive material are relevant or otherwise admissible under any state or federal rules of evidence. In addition, Atlas is not waiving its objections and is not waiving any defenses to any allegations which might be raised by EPA, WDNR, other regulatory bodies or any other entity purporting to enforce the terms of the CAA or the Wisconsin SIP.

II. Responses to Individual Requests

Appendix C of the Request asks for documents and other information responsive to 20 separate requests for information. Each of these 20 requests contains vague and overbroad terms and conditions.

Request No. 1: *Provide copies of all permits to construct, install, and operate sources of air pollutants (including diagrams, appendices and attachments) issued by EPA or the Wisconsin Department of Natural Resources (WDNR). For each permit:*

a. specify the date of permit issuance;
b. provide a list of equipment permitted;
c. state whether the permit is a permit to install or permit to operate; and,
d. state whether the projects allowed by each of the permits requested were completed as described in the applications for each of the permits. If the project was completed in a different manner, provide a description of how it was changed.

Response to Request No. 1: Atlas objects to the Request No. 1 on the grounds that Request No. 1 fails to define "permits," "construct," "install," "operate," "sources," "air pollutants," "diagrams," "appendices," "attachments," "issued/issuance," "equipment," "permitted," "projects," "allowed," "completed," "applications," "manner," or "changed."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- 05-JAJ-015 (Construction – Tower A) -- Bates Nos. ARP-Taylor00001
- 07-JAJ-042 (Construction – Tower B) -- Bates Nos. ARP-Taylor00017
- 12-MHR-176 (Construction – Replacement of Scrubbers with Oxidizers) -- Bates Nos. ARP-Taylor00054
- 627005280-F01 (Operation) -- Bates Nos. ARP-Taylor00103
- 627005280-P02 (Operation) -- Bates Nos. ARP-Taylor00127
- 627005280-P10 (Operation) -- Bates Nos. ARP-Taylor00156

The files listed above include only the final issued permits. Other documents associated with these permits (e.g., public notices, preliminary determinations, etc.) are available on the WDNR website.

a. See the files listed above.
b. See the files listed above.
c. See the permits listed above.
d. Atlas construes the term "completed as described in the applications" to mean that the facility was constructed in accordance with all material application requirements such that its operating emissions are consistent with those projected in or expected by the equipment described in the application materials. The projects associated with the above-listed permits were completed as described in the permit application; however the following explanations are provided.
   Permit no. 05-JAJ-015 (Construction):
   - Tower A baghouse C20:
     - (P13) Elevator 1, (P17) Elevator 2 and (P46) Elevator 5 are enclosed without local ventilation and, therefore, are not connected to baghouse C20.
     - (P27) Elevator 3 and (P42) Elevator 4 are currently sources that are listed on the permit and are planned to be tied in to baghouse (C20) in 2013. Original plans called for these sources to be directly tied into the baghouse; however, neither P27 nor P42 has been mechanically exhausted since operation began. Because they are enclosed sources, the ventilation originally planned and permitted was not found to be necessary after all. However, because of unanticipated dust build-up since the elevators began

operation, Atlas now plans to vent the sources as originally planned and permitted.

- (P45) Conveyor 3 was a duplication of (P49) Weigh Belt; (P49) is tied to (C20).

- Tower A Scrubber C50:
  - (P54) Surge tank was included in preliminary plans but later determined not to be necessary for the production line; (T31) Hexa tank 1 and (T32) Hexa tank 2 were described in the application as emission sources, however they are not emission sources and were therefore not vented to scrubber. (T31) Hexa tank 1 and (T32) Hexa tank 2 are no longer listed as sources in the most recent construction permit (12-MHR-176).

Permit no. 07-JAJ-042 (Construction):

- Tower B baghouse (C120):
  - (P113) Elevator 11, (P117) Elevator 12 and (P145) Elevator 15 are enclosed without local ventilation and, therefore, are not connected to baghouse (C120).
  - (P127) Elevator 13, (P142) Elevator 14 and (P162) Elevator 16 are currently sources that are listed on the permit and are planned to be tied in to baghouse (C120) in 2013. Similar to P27 and P42 described above, original plans called for these sources to be directly tied into the baghouse; however, neither P127 nor P142 has been mechanically exhausted since operation began. Because they are enclosed sources, the ventilation originally planned and permitted was not found to be necessary after all. However, because of unanticipated dust build-up since the elevators began operation, Atlas now plans to vent the sources as originally planned and permitted.
  - (P161) Conveyor 13 was a duplication of (P163); Weigh Belt, (P163) is tied in to (C120).
  - (P165) Jumbo Bagger Surge Tank and (P166) Bag Scale were never installed because these sources were later determined not to be necessary for this operation. (P165) is no longer listed in the most recent construction permit (12-MHR-176).
- Tower B Scrubber (C150):

- (T131) Hexa tank 11 and (T132) Hexa tank 12 were described in the application as emission sources; however they are not are not emission sources and were, therefore, not vented to the scrubber. These devices are no longer listed as sources in the most recent construction permit (12-MHR-176).
- (P128) Resin tank and (P129) Weigh Hopper were tied in to baghouse (C120) instead of Scrubber (C150) consistent with how Tower A was constructed.
- (P127) Elevator 13 was listed as a source to tie in to (C150) Scrubber, but will be tied in to (C120) baghouse instead. The ventilation configuration of (P127) and (P129) are properly denoted in the most recent construction permit (12-MHR-176).

- Permit No. 627005280-P10 (Operating Permit)
  - The as-built stack heights for the Tower A silo vent stacks designated as S14, S15 and S22 (Silo Vent), were less than minimum permitted stack heights. Dispersion modeling was conducted to demonstrate that modeled ambient impacts were acceptable at the lower heights. At the request of WDNR, the stacks were extended to coincide with the permitted minimum stack heights. See response to Request No. 4 for additional information and documentation concerning the silo vent stacks.
  - Tower A – Resol Bag Feeding Area is tied into the Baghouse C20 but does not have a process ID number at this time. Tower B – Resol Bag Feeding Area as well as the Modified Resin Tank are tied into the Baghouse C120. Atlas plans to submit an application to the WDNR in 2013 to revise its operating permit to include these sources in the listing of sources associated with the respective stack / control device combinations.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 2: *Clearly identify and list which emission and process units, control devices, and stacks comprise each Tower at the Facility. Include the unit's permit identification numbers*

(e.g. Stack S15, Control Device C15, and Process P15), a description of the unit (e.g. scrubber, continuous mixer), and the date of installation.

Response to No. 2: Atlas objects to the Request No. 2 on the grounds that Request No. 2 fails to define "emission," "process unit," "control devices," "stacks," "comprise," "unit," "permit," "identification number," "description," or "installation."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- Taylor Emission-Process Units, Control Devices and Stacks -- Bates Nos. ARP-Taylor00192

Atlas interprets the term "date of installation" to mean the date of initial operation of each unit. Atlas provided WDNR with notice of construction commencement of the facility; however, Atlas is not required to generate or maintain records of the date construction commenced for each unit.

Also note, Tower A – Resol Bag Feeding Area is tied into the Baghouse C20 but does not have a process ID number at this time. Tower B – Resol Bag Feeding Area as well as the Modified Resin Tank are tied into the Baghouse C120, but do not have a process ID number at this time. Atlas plans to submit an application to the WDNR in 2013 to revise its operating permit to include these sources in the listing of sources associated with the respective stack / control device combinations. Though the addition of these sources may result in a relatively small increase the inlet loading, "the effluent particle concentration from a fabric filter is nearly constant" and baghouses "can be considered to be a constant outlet devices rather than constant efficiency devices." (EPA-452/F-03-025, Air Pollution Control Technology Fact Sheet: Fabric Filter – Pulse-Jet Cleaned Type). Consequently, no change in permitted emissions is anticipated in association with the tie-in of these sources to the respective baghouses.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 3: *Provide copies of all applications which were submitted by or on behalf of the Facility to the WDNR for construction, operating, PSD, or Title V permits since its construction, with the project number assigned by WDNR for such permitting request or action.*

Response to No. 3 Atlas objects to the Request No. 3 on the grounds that Request No. 3 fails to define "applications," "submitted," "construction," "operating," "project number," "permitting request," or "action."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:
- ARP Taylor Construction Permit 05-JAJ-015 Application -- Bates Nos. ARP-Taylor00194
- ARP Taylor Construction Permit 07-JAJ-042 Application -- Bates Nos. ARP-Taylor00469
- ARP Taylor Construction Permit 12-MHR-176 Application -- Bates Nos. ARP-Taylor00736
- ARP Taylor Operating Permit 627005280-P02 NR 407 Renewal Application 04-08-2011 -- Bates Nos. ARP-Taylor00851

Atlas interprets the term "application" to mean the initial materials submitted by Atlas to WDNR and does not include subsequent correspondence. It is common for additional communication to occur between the WDNR and the permit applicant after the initial application materials are submittal. Those additional communications are not enclosed.

The information and/or consultation for this response were provided by the following individuals:

Erica Grant, Atlas Resin Proppants
Rob Lathrop, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 4: *Provide copies of any and all Notices of Violation received from the WDNR or local environmental agency, and corrective action plans submitted to the WDNR from January 2008 to the present, relating to air emissions at the Facility.*

Response to Request No. 4: Atlas objects to the Request No. 4 on the grounds that Request No. 4 fails to define "Notices of Violation," "received," "local environmental agency," "corrective action plans," "present," or "air emissions."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Although a Letters of Noncompliance have not specifically been requested by EPA, Atlas is producing them for purposes of completeness. Please reference the following attached electronic files:

- 06-09-Notice of Violation -- Bates Nos. ARP-Taylor00891
- 09-12-Letter of Noncompliance – Bates Nos. ARP-Taylor00897

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 5: *Provide copies of any and all alternative monitoring, instrumentation, or operating scenarios that have been submitted to the WDNR including any responses from WDNR, diagrams, appendices, and attachments, relating to air emissions at the Facility.*

Response to Request No. 5: Atlas objects to the Request No. 5 on the grounds that Request No. 5 fails to define "alternative monitoring," "instrumentation," "operating scenarios," "diagrams," "appendices," "attachments," "air emissions."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- NTU's -- Signed NTU Variance Request -- Bates Nos. ARP-Taylor00914
- NTU's -- NTU-Particulate Stack Test Notification and Test Plan -- Bates Nos. ARP-Taylor00909
- NTU's -- WDNR Variance Request Approval -- Bates Nos. ARP-Taylor00918
- NTU's -- WDNR Release from NTU Compliance Readings -- Bates Nos. ARP-Taylor00916

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants

Request No. 6: *For each calendar year from 2008 to present, provide copies of each periodic monitoring report, each deviation report, each annual air emission statement or report, and each annual compliance certification submitted to EPA and/or WDNR.*

Response to Request No. 6: Atlas objects to the Request No. 6 on the grounds that Request No. 6 fails to define "calendar year," "present," "periodic monitoring report," "deviation report," "annual air emission statement," "report," or "annual compliance certification."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- 2008 Reports -- Bates Nos. ARP-Taylor00920
- 2009 Reports -- Bates Nos. ARP-Taylor01010
- 2010 Reports -- Bates Nos. ARP-Taylor01094
- 2011 Reports -- Bates Nos. ARP-Taylor01188
- 2012 Reports -- Bates Nos. ARP-Taylor01229

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Rob Lathrop, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 7: *Provide monthly production data for each Tower from January 1, 2008 to the date of this request.*

Response to Request No. 7: Atlas objects to the Request No. 7 on the grounds that Request No. 7 fails to define "production data," or "date of this request."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:
- Question 7 Taylor Production-- Bates Nos. ARP-Taylor01285

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Knutson, Atlas Resin Proppants

Request No. 8: *For each emission test, emission characterization, performance test, compliance test, engineering test, test for general information, capture efficiency study or test, and any test, analysis, or determination of destruction efficiency, for any air pollutant conducted since*

January 1, 2005, provide a copy of the full test report. Include all test runs, even if a full test series was not completed. Indicate whether such report was shared with the local and/or state permitting agency. For each test during which the source was not operating at maximum design capacity, provide an explanation why production was limited. If not included in the report, also provide the following:

a. *the emission unit being tested;*
b. *the date of the test;*
c. *the test method(s) used;*
d. *the selection describing the process parameters and production or processing rates at the time of the test; and*
e. *copies of any reports of visible emission observations conducted during each test.*

Response to Request No. 8: Atlas objects to the Request No. 8 on the grounds that Request No. 8 fails to define "emission test," "emission characterization," "performance test," "compliance test," "engineering test," "test," "general information," "capture efficiency," "study," "analysis," "determination," "destruction efficiency," "air pollutant," "full test report," "test runs," "full test series," "completed," "shared," "local permitting agency," "source," "operating," "maximum design capacity," "explanation," "production," "limited," "emission unit," "test method(s)," "selection," "process," "parameters," "production," "processing," "rates," "at the time of the test," "visible emission observations," or "conducted."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- May 4, 2006 Stack Test-- Bates Nos. ARP-Taylor01404
- March 17, 18, 19.2009 Stack Test -- Bates Nos. ARP-Taylor01330
- ARP Taylor – Engineering Study March 2010 -- Bates Nos. ARP-Taylor01287
- January 12, 2011 Stack Test -- Bates Nos. ARP-Taylor01298

Each test was conducted at the maximum design capacity as understood at the time the test was conducted (which we understand to be 2500 lbs of sand plus resin) and reflected in stack test plans and protocols submitted and approved by WDNR. Atlas has been capable of operating the process at production capacity greater than the maximum design

capacity (3000 lbs of sand plus resin). Atlas has conducted stack testing at this capacity but has not yet received the results.

a. See the reports listed above.
b. See the reports listed above.
c. See the reports listed above.
d. See the reports listed above.
e. All of the required stack testing reports listed above were provided to WDNR; the 2010 engineering study was not provided to WDNR. Visible emissions testing was not required for any of the tests for which reports are listed above.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 9: *Provide a list of all air pollution control equipment used at the Facility since its construction (e.g. baghouses, wet scrubbers, thermal oxidizers, etc.). The list must include the date of startup (and shutdown, if applicable) of the equipment, the manufacturer, type of equipment, a listing of all units which use the equipment for air pollution control, and general operating parameters (i.e. flow rate, capacity, removal efficiency, etc.). For statements of removal efficiency, describe in detail how this was determined (e.g. testing, manufacturer rating), and provide all documents relevant to that determination. If the equipment has been shut down or removed, describe in detail the reason for shut down or removal and what if any equipment has replaced it.*

Response to Request No. 9: Atlas objects to the Request No. 9 on the grounds that Request No. 9 fails to define "air pollution," "control equipment," "used," "since its construction," "date of startup," "date of shutdown," "equipment," "manufacturer," "type," units," "air pollution control," "general operating parameters," "removal efficiency," "this," "determined," "testing," "manufacturer rating," "relevant," "determination," "removed," or "replaced."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- Air Pollution Control Equipment -- Bates Nos. ARP-Taylor01460
- Oxidizer operations -- Bates Nos. ARP-Taylor01463
- Quote Altas 12-7160 – Bates Nos. ARP-Taylor01480

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Rob Lathrop, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 10: *For each baghouse listed in Paragraph 9, from January 1, 2008 to the date of this information request, provide:*

a. baghouse type (e.g., pulse jet);
b. fabric filter material used and manufacturer specifications;
c. baghouse capacity;
d. fan type(s) and capacities;
e. dates of installation of all improvements and modifications, and a narrative summary of the improvements and modifications made;
f. a list of all emissions units connected to the baghouses and a detailed explanation of how emissions are routed to it (such as via ducted pickup points, canopies, hoods, etc.). Include a description of any capture mechanisms, and the location of all devices used to measure air flow or pressure;
g. all records of the differential pressure readings taken at each baghouse in an Excel Workbook or other compatible format, including the date and time of the readings;
h. all inspection, maintenance, and repair logs; and
i. a list of periods when an emission source was in operation, but the process baghouse was down. Provide this information in an Excel Workbook or other compatible format. For each period the process baghouse was down, provide an explanation as to why the process baghouse was down.

Response to Request No. 10: Atlas objects to the Request No. 10 on the grounds that Request No. 10 fails to define "baghouse," "date of this information request," "type," "manufacturer specifications," "capacity," "fan type(s)," "installation," "improvements," "modifications," "emissions units," "connected," "emissions," "routed," "ducted pickup points," "canopies," "hoods," "capture mechanism," "location," "devices," "measure," "air flow," "pressure," "records," "differential pressure readings," "date," "time," "readings," "inspection," "maintenance," "repair," "logs," "periods," "in operation," "process," or "down."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- Section b-d - Sly filter, capacity and fan type-capacity information – Bates Nos. ARP-Taylor01752
- Section f - Emission units connected to baghouse -- Bates Nos. ARP-Taylor01754
- Section g – Differential Pressure Records – Bates Nos. ARP-Taylor01755
- Baghouse Tower A and B Maint Summary – Bates Nos. ARP-Taylor01510
- Inspection Documentation -- Bates Nos. ARP-Taylor01521

a. Sly Inc. Model STJ-1315-10 W.I.P. Tubejet WIP Dust Collector
b. See the files listed above.
c. See the files listed above.
d. See the files listed above.
e. Tower A: an explosion suppression system was installed on June 2, 2010; no improvements or modifications have been made to the Tower B baghouse.
f. See the files listed above.
g. See the files listed above. Instances where "Down" is recorded on the log sheet refer to periods when the process was not operating.
h. See the files listed above.
i. The process equipment cannot operate when the baghouses are not in operation.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Knutson, Atlas Resin Proppants
Perry Bue, Atlas Resin Proppants
Rob Lathrop, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 11: *At the time of this request, if the Facility is operating one or more scrubbers, identify the scrubber unit and provide the following information from January 1, 2008 to the date of this request, for each scrubber at the Facility:*

- *a. a complete description of the method of operation of the wet scrubbers, including but not limited to:*
  - *i. the average and maximum liquor flow rate;*
  - *ii. the normal and minimum recycle rate (i.e. the percentage of the entire flow of liquor through the scrubber that consists of liquor that has already passed through the scrubber);*
  - *iii. the contents of the scrubbing liquor. If water, where the water comes from and how it has been treated;*
  - *iv. the fate of spent scrubbing liquor; and,*
  - *v. the frequency of complete liquor change-outs.*
- *b. records documenting quantity and date of spent scrubbing liquor sent off-site for disposal;*
- *c. copies of any and all spent scrubbing liquor analysis testing which quantifies the VOC and/or HAP retention in the spent scrubbing liquor;*
- *d. in Microsoft Excel or other compatible format, the pressure drop across the wet scrubbers and demister, in inches of water column, the pH of the absorption scrubbing fluid, the flow of liquor in gallons per minute, and the motor power of the scrubber liquor recirculation pump;*
- *e. manufacturer's specifications operating manual for each scrubber;*
- *f. records of all inspections, checks, and any maintenance or repairs performed on the wet scrubber system, containing the date of the action and the results;*
- *g. date and documentation of the last calibration of the wet scrubber pressure drop, liquor flow, and pH monitoring devices;*
- *h. the frequency of removal of scrubber sludge;*
- *i. a description of the fate of the scrubber sludge including any log or listing which notates of the amount discarded and location or locations it is sent or sold;*

j. records documenting quantity and date of scrubber sludge that is sent off-site for disposal;
k. any testing conducted on the sludge; and,
l. a list of periods when an emission source was in operation, but the process wet scrubber or scrubbers were not in operation. Provide this information in an Excel Workbook or other compatible format. For each period the process scrubber was down, provide an explanation as to why the process scrubber was down.

Response to Request No. 11: Atlas objects to the Request No. 11 on the grounds that Request No. 11 fails to define "at the time of this request," "operating," "scrubber unit," "complete description," "method of operation," "average," "maximum," "flow rate," "normal," "minimum," "recycle rate," "entire flow," "through the scrubber," "passed through," "contents," "treated," "fate," "spent," "frequency," "complete," "change-outs," "quantity," "date," "off-site," "disposal," "analysis," "testing," "retention," "pressure drop," "across," "wet scrubber," "demister," "water column," "absorption," "motor power," "recirculation pump," "manufacturer's specifications," "inspections," "checks," "maintenance," "repairs," "performed," "date of the action," "results," "calibration," "monitoring devices," "removal," "scrubber sludge," "log," "listing," "discarded," "sent," "sold," "testing," "sludge," "periods," "emission source," "operation," "process wet scrubber," or "down."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Since March 19, 2013, the Facility has operated two recuperative thermal oxidizers. No scrubbers were operating at the time Atlas received the Request.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants

Request No. 12: *At the time of this request, if the Facility is operating one or more thermal oxidizers, provide the following information for each thermal oxidizer on both Towers A and B:*

a. the date the control device became operational;
b. if emission testing has not yet been conducted on the thermal oxidizer, provide a full copy of the test protocol for any planned testing and any proposed schedules for testing. Ensure the protocol includes at least the information listed in Appendix D;
c. records of calibration;
d. from the date the device became operational to the date of this request, provide in Excel Workbook or other compatible format, oxidizer combustion chamber temperature records (°F);
e. provide copies of manufacturer specifications for the thermal oxidizers at the Facility. Specifications must include a diagram of the entire unit and any filters, particulate capture systems, or other capture system the unit utilizes. If filters are a part of the oxidizer, provide a date (MM/DD/YYYY) and description of any issues the Facility has had with the internal filters; and,
f. a list of periods when an emission source was in operation, but the process thermal oxidizer was down. Provide this information in an Excel Workbook or other compatible format. For each period the process thermal oxidizer was down, provide an explanation as to why the process thermal oxidizer was down.

Response to Request No. 12: Atlas objects to the Request No. 12 on the grounds that Request No. 12 fails to define "at the time of this request," "operating," "thermal oxidizer," "information," "date," "control device," "became operational," "emission testing," "full copy," "test protocol," "planned testing," "proposed schedules," "testing," "protocol," "calibration," "device became operational," "date of this request," "oxidizer combustion chamber," "temperature," "manufacturer specifications," "diagram," "entire unit," "filters," "particulate capture systems," "unit," "issues," "internal filters," "periods," "emission source," "process thermal oxidizer," or "down."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:

- Section b - June 24-27, 2013 Airtech 4365 Protocol -- Bates Nos. ARP-Taylor46470

- Section c – RTO Maintenance & Calibration Information -- Bates Nos. ARP-Taylor46479
- Section d – RTO Temperature Data - Tower A RTO Temp Data -- Bates Nos. ARP-Taylor46436
- Section d – RTO Temperature Data - Tower B RTO Temp Data -- Bates Nos. ARP-Taylor46441
- Section e – Manufacturers specs - Manufacturers Specs -- Bates Nos. ARP-Taylor46445

Please note that the temperature data were not available in Excel format, but have been provided in the graphical format in which they are available in PDF files.

a. Tower A RTO became operational February 13, 2013; Tower B RTO became operational March 19, 2013.
b. Testing was recently conducted and Atlas has not yet received the test report. The protocol is enclosed with this response.
c. The RTOs have not been in operation long enough to require calibration in accordance with manufacturer recommendations. In accordance with Malfunction Prevention and Abatement Plan (MPAP) requirements under s. NR 439.11, Wis. Adm. Code, calibration is required to be conducted at least annually, or more frequently as recommended by the manufacturer. In this case, manufacturer specifications generally establish more frequent calibration based on operating hours; however, to date, Atlas' operations of the oxidizers have not reached any hourly operation threshold for calibration.
d. See the 'Tower A RTO Temp Data' and 'Tower B RTO Temp Data' files listed above. Note, when originally installed, the temperature set point was set at 1400 °F in accordance with Atlas' permit requirement limit of. During the first month of operation of the new RTOs, the actual temperature was observed to fluctuate, while generally maintaining an average temperature at the set point. To reduce the potential for temperature fluctuations, the set point was increased to 1425°F on each of the RTO's. This adjustment was made on May 22, 2013, for the Tower A RTO, and on May 2, 2013 for the Tower B RTO.
e. See the 'Manufacturer specs' file listed above. The RTOs do not require filters.

f. The processes and the RTOs are operationally tied together such that if the process is operating, the RTO is also operating. The process equipment cannot operate when the RTOs are not in operation.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Knutson, Atlas Resin Proppants
Rob Lathrop, Atlas Resin Proppants

Request No. 13: *Provide lists or logs of all maintenance performed on the oxidizers at the Facility from August 1, 2012 to the date of the planned thermal oxidizer performance testing.*

Response to Request No. 13: Atlas objects to the Request No. 13 on the grounds that Request No. 13 fails to define "logs," "maintenance," "performed," "oxidizers," "date," "planned," "thermal oxidizer," or "performance testing."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic files:
- Tower A RTO Maint Log-2013 -- Bates Nos. ARP-Taylor46488
- Tower B RTO Maint Log-2013 -- Bates Nos. ARP-Taylor46489

Because the RTOs were installed in 2013 there are no maintenance records from 2012.

The information and/or consultation for this response were provided by the following individuals:
Joe Knutson, Atlas Resin Proppants
Perry Bue, Atlas Resin Proppants

Request No. 14: *Provide all Material Safety Data Sheets (MSDS) (or other technical documents which show the free phenol content of each resin used) of all resins, product additives, and product line cleaning solutions used from January 1, 2008 to the date of this request.*

Response to Request No. 14: Atlas objects to the Request No. 14 on the grounds that Request No. 14 fails to define "other technical documents," "resins," "product additives," "product line," "cleaning solutions," or "date of this request."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic file:
- MSDS -- Bates Nos. ARP-Taylor46490

Atlas does not use any product line cleaning solutions.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Rob Lathrop, Atlas Resin Proppants

Request No. 15: *Provide copies of any and all product testing which documents the Volatile Organic Compound (VOC) and/or Hazardous Air Pollutant (HAP) retention in the resin-coated sand product(s).*

Response to Request No. 15: Atlas objects to the Request No. 15 on the grounds that Request No. 15 fails to define "product testing," "retention," or "resin-coated," "product(s)."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic file:
- VOC-HAP retention in PRC and CRC -- Bates Nos. ARP-Taylor46711

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Cathleen Hegge, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 16: *Provide complete copies of any reports of analyses of the VOC content of resins, product additives, and product line cleaning solutions used from January 1, 2008 to the date of this request.*

Response to Request No. 16: Atlas objects to the Request No. 16 on the grounds that Request No. 16 fails to define "complete," "reports," "analyses," "resins," "product additives," "product line," "cleaning solutions," or "date of this request."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

No such reports or analyses have been conducted by Atlas.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 17: *Provide, in Microsoft Excel or other compatible format, daily usage of hexamethylene tetramine (hexa) for each Tower in pounds per day and pounds per month from January 1, 2008 to the date of this request.*

Response to Request No. 17: Atlas objects to the Request No. 17 on the grounds that Request No. 17 fails to define "daily usage," "pounds per day," "pounds per month," or "date of this request."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic file:
- Hexa Use by Month -- Bates Nos. ARP-Taylor46714
- Taylor Hexa by Day for Jan 2012-June 17 2013 -- Bates Nos. ARP-Taylor46715

Atlas was not required to record daily hexa usage until Permit No. 627005280-P10 was issued on January 3, 2012.

Daily hexa usage is calculated by taking the number of batches produced during a 24-hour period and multiplying it by the amount of dry hexa per batch. This calculation provides an overall amount of dry hexa used per day per tower.

Monthly hexa usage is calculated by month-end inventory reconciliation and is then weighted by the amount of production per tower. The majority of this information was not collected on a tower by tower basis, and therefore the per-tower usage numbers should not be relied upon to conclusively determine monthly hexa use per tower.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants

Request No. 18: *Provide, in Microsoft Excel or other compatible format for each Tower, from January 1, 2008 to the date of this request, the total amount of each resin, product additive (ex. chembetaine, silicone, etc.), and cleaning solution used in pounds per month.*

Response to Request No. 18: Atlas objects to the Request No. 18 on the grounds that Request No. 18 fails to define "date of this request," "total amount," "resin," "product additive," "cleaning solution," "used," or "pounds per month."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic file:
- Resin,Chembetaine, Silicone Use by Month - Taylor -- Bates Nos. ARP-Taylor46727

Monthly Novolac and Resol Resin usage has been collected in the past as required by Atlas' permits. Monthly usage of these materials is no longer required, but Atlas continues to document monthly usage.

Monthly usage of Silicone and Chembetaine has never been required by any of Atlas' permits. Atlas began collecting monthly usage of these materials in September 2009 for inventory control.

This information is calculated by month end inventory reconciliation and is then weighted by production per tower. The majority of this information was not collected on a tower by tower basis, and therefore the per-tower usage numbers should not be relied upon to conclusively determine monthly use per tower.

Atlas does not use any product line cleaning solutions.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants

Request No. 19: *Provide, in Microsoft Excel or other compatible format, a spreadsheet showing monthly emissions for each Tower individually of: Particulate Matter (PM), PM_{10}, $PM_{2.5}$ (lb/hr), VOC (lb/hr), phenol (lb/hr, lb/month), ammonia (lb/hr), formaldehyde (lb/hr), and nitrogen*

oxides (NO_x) (lb/hr and lb/lb hexa), from January 1, 2008 to the date of this request. Also include a detailed explanation of the methods used to determine the total emissions for each pollutant, any and all associated calculations, and emission factors. Clearly indicate the source of any emission factors used in these calculations (i.e. manufacturer, AP-42, etc.) If a manufacturer-given factor, provide the document or documents which indicate, describe, or note the proper use of the factor.

Response to Request No. 19: Atlas objects to the Request No. 19 on the grounds that Request No. 19 fails to define "monthly emissions," "date of this request," "detailed explanation," "methods," "determine," "total emissions," "pollutant," "associated calculations," "emission factors," "source," "calculations," "manufacturer-given," "indicate," "describe," "note," or "proper use."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

Please reference the following attached electronic file:
- ARP Taylor R19 Emissions Spreadsheet -- Bates Nos. ARP-Taylor46730

Atlas has not historically been required to document monthly emissions of $PM_{2.5}$. As such, no $PM_{2.5}$ documentation is available. Also note, prior to the issuance of Permit No. 12-MHR-176 and installation of the RTOs in 2013, NOx emissions were not expected in association with hexa consumption and, therefore, have only been estimated on a lb/lb-hexa basis for the period of time that the oxidizers have operated.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants
Joe Liello, TRC Environmental Corp.

Request No. 20: *Provide a list of all capital and maintenance projects of an amount greater than $25,000 on emission units at the Facility and were approved or completed between January 1, 2010 and the date of this request. For each project, identify the work performed, the date completed or projected to be completed, and the dollar amount approved and/or expended.*

Response to Request No. 20: Atlas objects to the Request No. 20 on the grounds that Request No. 20 fails to define "capital," "maintenance," "projects," "amount," "emission units," "approved," "completed," "date of this request," "identify," "work," "performed," "projected" or "expended."

Subject to and without waiving its objections, Atlas made its best efforts to reasonably interpret these various terms in the absence of specific definitions in a manner generally consistent with Atlas's internal practices and standard industry usage.

The only capital or maintenance project with a cost greater than $25,000 was the installation of the RTOs in 2013. To install the RTOs, the old scrubber units were first completely removed, including the sludge tanks. The Quadrant SR-6000 Thermal Oxidizers and associated equipment were then installed in both Tower A and Tower B. The total project cost was $1,807,340.26.

The information and/or consultation for this response were provided by the following individuals:
Erica Grant, Atlas Resin Proppants

Todd Waite, Atlas Resin Proppants

Summary and Certification

Persons who provided information or who were consulted in preparing this response include:

Atlas's production of information in response to the Request does not represent nor act as an admission by Atlas that the information taken from preexisting documents used to compile this response is true, correct or accurate, nor does it act to authenticate such information for purposes of admissibility in any administrative or judicial proceeding.

> I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that

the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to section 113(c)(2) of the Act, and 18 U.S.C. §§1001 and 1341. Files on the enclosed disc were scanned for viruses using Kaspersky 6.0.

Sincerely,

Erica Grant

Erica Grant,
Atlas Resin Proppants, LLC

031928-0002\13397186.5